

CLAIMS

This is a complete and current listing of the current claims marked with status identifiers in parentheses.

1. (Previously Presented) An image blurring correction apparatus, comprising:
 - an image taking optical system of a camera capable of changing a focal length;
 - an image blurring detection device which detects an image blurring of an image formed by the image taking optical system;
 - an image blurring correction device which displaces a shooting range of the image taking optical system according to the image blurring detected by the image blurring detection device so as to correct the image blurring; and
 - an image blurring correction stopping device which, if determined that the camera is performing at least one of pan operation and tilt operation, stops image blurring correction by the image blurring correction device and returns the shooting range of the image taking optical system displaced by the image blurring correction device to a reference position,
- wherein the image blurring correction stopping device changes a speed at which the shooting range of the image taking optical system is returned to the reference position according to the focal length of the image taking optical system.

2. (Previously Presented) The image blurring correction apparatus as defined in claim 1, wherein the image blurring correction device displaces the shooting range by displacing a correcting lens placed in the image taking optical system within a surface perpendicular to an optical axis of the image taking optical system.

3. (Previously Presented) The image blurring correction apparatus as defined in claim 1, wherein the image blurring correction stopping device changes the speed at which the shooting range of the image taking optical system is returned to the reference position so that the speed in a case where the focal length of the image taking optical system is short is lower than the speed in a case where the focal length is long.

4. (Previously Presented) The image blurring correction apparatus as defined in claim 3, wherein the image blurring correction device displaces the shooting range by displacing a correcting lens placed in the image taking optical system within a surface perpendicular to an optical axis of the image taking optical system.

5. (Previously Presented) An image blurring correction apparatus, comprising:

an image blurring detection device which detects an image blurring of an image formed by an image taking optical system of a camera;

an image blurring correction device which displaces a shooting range of the image taking optical system according to the image blurring detected by the image blurring detection device so as to correct the image blurring; and

an image blurring correction stopping device which, if determined that the camera is performing at least one of pan operation and tilt operation, stops image blurring correction by the image blurring correction device, then keeps the shooting range of the image taking optical system at a fixed position until a predetermined time elapses, and then starts to return the shooting range of the image taking optical system displaced by the image blurring correction device to a reference position after the predetermined time elapses.

6. (Previously Presented) The image blurring correction apparatus as defined in claim 5, wherein the image blurring correction device displaces the shooting range by displacing a correcting lens placed in the image taking optical system within a surface perpendicular to an optical axis of the image taking optical system.

7. (Previously Presented) An image blurring correction apparatus, comprising:

an image blurring detection device which outputs a blurring signal according to an image blurring of an image formed by an image taking optical system of a camera;

a filter processing device which filters the blurring signal outputted by the image blurring detection device and calculates a correcting position to correct the image blurring;

an image blurring correction device which displaces a predetermined control subject for displacing an effective shooting range of the image taking optical system to the correcting position calculated by the filter processing device so as to correct the image blurring;

a pan/tilt operation determination device which determines whether or not at least one of pan operation and tilt operation of the camera is performed; and

a pan/tilt operation time control device which calculates the correcting position of the control subject of the image blurring correction device with a predetermined function of which variable is time if the pan/tilt operation determination device determines that the at least one of the pan operation and the tilt operation of the camera is performed, and displaces the control subject to the calculated correcting position so as to return the control subject to a predetermined reference position in a predetermined elapsed time from a moment at which it is determined that the at least one of the pan operation and the tilt operation of the camera is performed.

8. (Previously Presented) The image blurring correction apparatus as defined in claim 7, wherein the control subject comprises a correcting lens which is placed in the image taking optical system and is displaced within a surface perpendicular to an optical axis of the image taking optical system so as to displace the shooting range.

9. (Previously Presented) The image blurring correction apparatus as defined in claim 7, wherein the predetermined function is one of a sine function and a quadratic function.

10. (Previously Presented) The image blurring correction apparatus as defined in claim 9, wherein the control subject comprises a correcting lens which is placed in the image taking optical system and is displaced within a surface perpendicular to an optical axis of the image taking optical system so as to displace the shooting range.